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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|------------------|----------------------|---------------------|------------------|
| 10/581,318 | 06/02/2006 | Peter Hesoun | 35947-231351 | 3651 |
| 26694 7590 08/09/2010 VENABLE LLP | | | EXAMINER | |
| P.O. BOX 343 | 85 | FORD, JOHN K | | |
| WASHINGTO | N, DC 20043-9998 | | ART UNIT | PAPER NUMBER |
| | | | 3744 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 08/09/2010 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary Examiner

| Application No. | Applicant(s) | |
|-----------------|---------------|--|
| 10/581,318 | HESOUN ET AL. | |
| Examiner | Art Unit | |
| John K. Ford | 3744 | |

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|---|---|--|-------|--|--|--|--|--|
| | John K. Ford | 3744 | | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | | | | | | | |
| Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D. Extensions of time may be available under the provisions of 37 CPR 1.1 If NO period for reply is appecified above, the maximum statutory period. If NO period for reply with the set or extended period for reply will. by statute Any reply received by the Cffice later than three months after the mailing aemed patent term adjustment. See 37 CPR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this o D (35 U.S.C. § 133). | | | | | | |
| Status | | | | | | | | |
| 1) Responsive to communication(s) filed on 02 Ju | ine 2010. | | | | | | | |
| | - · · · · · · · · · · · · · · · · · · · | | | | | | | |
| 3) Since this application is in condition for allowar | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Disposition of Claims | | | | | | | | |
| · _ | | | | | | | | |
| 4) Claim(s) <u>1-10</u> is/are pending in the application. | | | | | | | | |
| 4a) Of the above claim(s) 2.3.5.9 and 10 is/are withdrawn from consideration. | | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | | |
| 6)⊠ Claim(s) <u>1,4 and 6-8</u> is/are rejected. | | | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | | | | | | |
| Application Papers | | | | | | | | |
| 9) The specification is objected to by the Examine | r. | | | | | | | |
| 10) The drawing(s) filed on is/are: a) acc | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | | |
| · | priority under 35 LLS C & 119/a | \-(d) or (f) | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | | | |
| | | | | | | | | |
| Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| Copies of the certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage. | | | | | | | | |
| application from the International Bureau | • | su iii tiiis ivationai | Stage | | | | | |
| | | nd. | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
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| | | | | | | | | |
| Attachment(s) | | | | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Interview Summary Paper No(s)/Mail Da | (PTO-413) ate | | | | | | |

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Information Disclosure Statement(s) (PTO/S5/08)
 Paper No(s)/Mail Date ______.

5) Notice of Informal Patent Application.
6) Other: _____

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

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Applicant's responses of June 2, 2010 and May 25, 2010 have been studied carefully. In the June 2, 2010 response (page 5, second paragraph) applicant makes some unusual statements and requests that the election requirement be withdrawn. The election requirement was made final in the previous office action and therefore it is not withdrawn. In the June 2, 2010 response (page 5, third paragraph) applicant gives a long explanation of what is meant by "arbitrary" in the claims. If that is what "arbitrary" is meant to be, applicant should put it into the claim rather than rely on an ambiguous expression like "arbitrary". The term remains ambiguous and the claims using it are rejected as such.

Applicant's supplemental response of August 6, 2009 identifying claims 1, 3, 4 and 6-9 as readable on the elected species of Figure 1 with an axial flow fan placed below the heat exchanger is again acknowledged. The examiner disagreed with applicant's identification of claims 3 and 9 as readable on the elected species and applicant has withdrawn claims 3 and 9. Accordingly, claims 1, 4 and 6-8 are examined here.

Claim interpretation:

Functional language in the claims is treated consistent with MPEP 2114, incorporated here by reference. That is to say, functional language in the claims is not extended significant patentable weight in assessing the patentability of the underlying

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apparatus. The apparatus claims are examined for what the claimed structure <u>is</u>, not what it does or how it is out together.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4 and 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how one is supposed to assess the term "arbitrarily positioned" in claims 1 and 8. How would the would-be infringer know if he was infringing the claim? Neither the specification nor the claim sets gives any guidance as to which positions would be "arbitrary" and which positions would not be "arbitrary." The would-be patent owner would no doubt find any position that the would-be infringer decided to place his fan to be "arbitrary." Likewise the would-be infringer would no doubt find any position that the would-be infringer decided to place his fan to be anything but arbitrary (e.g. deliberately chosen to be next to a seat but not blowing directly on the person seated there). The term "arbitrary" is not quantifiable and therefore renders the claim vague and indistinct.

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In the June 2, 2010 response (page 5, third paragraph) applicant gives a long explanation of what is meant by "arbitrary" in the claims. If that is what "arbitrary" is meant to be, applicant should put it into the claim rather than rely on an ambiguous expression like "arbitrary". The term remains ambiguous and the claims using it are rejected as such.

It is submitted that the whole point of writing claims with clear structural limitations is so that the patent world does not have to engage in some sort of *ad hoc* analysis every time a claim is compared with a reference. Judge Rich, explaining current American law to European judges, described it this way:

"The U.S. is strictly an examination country and the main purpose of the examination, to which every application is subjected, is to try to make sure that what each claim defines is patentable. To coin a phrase, the <u>name of the game is the claim the function of claims is to enable everyone to know, without going through a lawsuit, what infringes the patent and what does not" (emphasis supplied).</u>

Giles Rich, The Extent of the Protection and Interpretation of Claims -- American Perspectives, 21 Int'l Rev. Indus. Prop. & Copyright L. 497, 499, 501 (1990).

It is also unclear to the examiner whether or not applicant is claiming a heating element and a blower module *per se* or whether applicant is claiming these elements (a heating element and a blower module) mounted at a certain location (see the limitation: suitable for horizontal mounting along an interior wall and near the floor of said

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vehicle"). The "suitable for" language would suggest the former (a heating element and a blower module per se) while the "said vehicle" language would suggest the latter (these elements in combination with vehicle structure). Which is it? Make the claims clear.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 1-266465 in view of Willingham (USP 4,257,554) or Berkoff (USP 3,324,938) and, optionally, any one of WO 01/89867 (applicant cited) or DE 19708815 (applicant cited) or Korean 2003-0031372.

JP '465 shows a convector having a heating element module (shown generally at 1) and a blower module (generally at 5). Pipes 2 and 3 with fins 6 and 18 are shown.

Unforced convection can occur through any of the fins when the blower module is turned off (just as in applicant's device) but always occurs through fins 18 (because there is no blower at that location). As shown in Figure 3, the forced convection can occur upwardly or, as shown in Figure 4, the forced convection can occur downwardly.

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Figure 2 of Willingham shows fan module that is selectively attachable to a heat exchanger. The fan module of Willingham is "adapted for attachment" to either face of the heat exchanger to which it is attached. To have used the Willingham fan module in place of the fan module of JP '465 would have been obvious to one of ordinary skill in the art. Such a fan module would advantageously reinforce the heat exchanger as discussed in Willingham, col. 9, lines 32-65, incorporated here by reference. It would also allow one or more that one fan to be used. In the June 1, 2010 response applicant alleges that Willingham is limited to one direction flow through a radiator and that Williamson "does not even suggest a vehicle heater". This is untrue. Willingham specifically states in the abstract (and elsewhere) that the blower can be used on a (vehicle) heater and that it can be mounted on either side of the heat exchanger and operate in pusher or sucker mode (see column 1, lines 52-58 of Willingham). The conclusory statement that Williamson is "non-analogous" art has no basis in fact and is therefore unconvincing.

Similarly, Berkoff teaches a fan module (10, 10') that can be arbitrarily positioned next to a convector wherever increased air flow is desired. To have used the Berkoff fan module (10 or 10') in place of the fan module 5 of JP '465 would have been obvious to one of ordinary skill in the art to advantageously allow the occupant's of the space to enjoy the freedom of choice as to where they desire the conditioned air to be blown.

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Assuming that applicant is positively claiming specifically locating the heating module and blower module in a vehicle, such placement is fairly taught by anyone of WO 01/89867 (applicant cited) or DE 19708815 (applicant cited) or Korean 2003-0031372.

To have located the JP '465/Williamson structure (as described above) or the JP '465/Berkoff structure (as described above) in a bus to advantageously temperature condition the people in the bus would have been obvious to one of ordinary skill in the art. Such placement is fairly taught by anyone of WO 01/89867 (applicant cited) or DE 19708815 (applicant cited) or Korean 2003-0031372. Regarding claim 8, to have reproduced the structure of JP '465/Williamson or JP '465/Berkoff as many times as necessary to condition the space would have been obvious to one of ordinary skill in the art (if necessary, such is fairly taught by anyone of WO 01/89867 (applicant cited) or DE 19708815 (applicant cited) or Korean 2003-0031372).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John K. Ford whose telephone number is 571-272-4911. The examiner can normally be reached on Mon.-Fri. 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/John K. Ford/ Primary Examiner, Art Unit 3744